

Patent claims

1. Aiming device (100) for drilling a hole in that
5 region of a bone (300) which is in the vicinity of
a joint, consisting of a U-shaped bow (110) having
at least one contact element (120) at one end of
the bow (110) and, at the other end of the bow
10 (110) a screw spindle (130) movable towards the
contact element (120) or in the opposite direction
and having a rotary grip (132), for clamping the
device (100) to the region in the vicinity of the
joint, and a drill bush (140), characterized in
15 that the drill bush (140) can be arranged at that
end with the contact element (120) and can be
removed, the bone compression produced by means of
the bow (110) persisting after removal of the
drill bush (140) for insertion of the bone screw.
- 20 2. Device according to Claim 1, characterized in that
the contact element is designed as a rotationally
movable adaptor bush (120).
3. Device according to either of the preceding
25 Claims, characterized in that the adaptor bush
(120) can be caused to form a plug connection with
a target plate (120) which can be screwed onto an
implant (410).
- 30 4. Device according to any of the preceding Claims,
characterized in that the drill bush (140) can be
guided through the adaptor bush (120) and can be

caused to engage the implant (410).

5. Device according to any of the preceding Claims,
characterized in that a scale (133) for
5 determining the length of a bone screw (510) to be
inserted into the hole is mounted on the screw
spindle (130) or on an element firmly connected to
or engaging said screw spindle.
- 10 6. Device according to any of the preceding Claims,
characterized in that that end of the screw
spindle (130) which faces the contact element
(120) has a rotationally movably mounted,
preferably changeable, pin (131).
- 15 7. Device according to any of the preceding Claims,
characterized in that the rotary grip is in the
form of a nut (132) mounted on the screw spindle
(130).
- 20 8. Device according to any of the preceding Claims,
characterized in that the nut (132) is mounted in
a recess of the bow (110).
- 25 9. Device according to any of the preceding Claims,
characterized in that the bow (110) is in the form
of a lattice structure or has various cut-outs
(112).
- 30 10. Method for inserting angle-stable, long screws in
the articular region of a bone, characterized in
that, before the operation, a target plate is

screwed to a lateral implant (bone plate), the target plate with the lateral implant is mounted on an adaptor bush of the aiming device by means of a plug connection, a drill bush is then
5 inserted into an orifice in a cylindrical guide, and the drill bush, on passing through the adaptor bush and the target plate, comes into contact with a complementary internal thread in a bore of the
10 implant, whereupon everything is placed together on the fragmented bone and clamped by a screw spindle of the aiming device and fixed through the implant by means of a proximal bone screw, so that the point of emergence of the distal, angle-stable screws can be determined prior to drilling after
15 everything has been correctly aligned, drilling can be effected through the integrated drill bush, it being possible directly to determine the length of the screw to be used and hence the depth of the hole to be drilled, in particular on the basis of
20 a scale mounted on the screw spindle, and thereafter the drill bush is removed and the distal bone screw can be inserted while maintaining the compression of the bone.

- 25 11. Set, in particular for carrying out the method according to Claim 10, characterized by a U-shaped bow (110) having an adjustable screw spindle (130), a target plate (200) which can be connected thereto, a drill bush (140) and an implant (410)
30 which can be temporarily fixed to the target plate (200) by means of the drill bush (140).

12. Set, according to Claim 11, characterized in that the temporary fixing of the target plate (200) to the implant (410) is effected by means of the drill bush (140) via a thread connection.